

## **\*QUALITY ASSURANCE PROVISIONS**

### **SPECIFICATION:**

NSN: 1680-01-114-6134

P/N: (78286) 70358-06307-111 Revision "L" OR LATEST REV

NOMEN: LINER, GERARBOX H-60 HELICOPTER

Articles to be furnished hereunder shall be manufactured, tested and inspected in accordance with drawing number (78286) 70358-06307-111 Revision "L" OR LATEST REV, and all details and specifications referenced therein.

### **I. Quality/Inspection Requirements**

- A. MIL-I-45208 or ISO 9000 equivalent applies:
- B. First Article Testing applies:
- C. Production Lot Testing applies:
- D. Mandatory Inspection applies: Refer to contract section C.

### **II. Supplemental Requirements**

- A. Additionally, para. 3.1-3.5, 5.1-5.2, 6.1-6.2 of MIL-Q-9858 or ISO 9000 equivalent apply.
- B. The contractor shall include on the detailed process/operation sheets developed, a tracking method that is traceable to the contract, all in house manufacturing processes and the identity of all manufacturing sources performing processes/ operations outside of their facilities. These sheets shall not be revised or altered after the successful completion of First Article or Production Lot Testing without approval from the basic design engineering activity via the PCO
- C. The Inspection Method Sheets which list the characteristics of each item produced under the contract shall have serial number traceability to the raw material, casting, or forging. The tracking method used or inspection/ method sheets shall be traceable to the contract. In addition, the contractor is responsible for providing complete inspection method sheets showing the actual dimensions taken.
- D. Markings should be I/A/W MIL-STD-130 REV. "K" para. 5.3.3(a), (b), (c) and (g). Method and location shall be I/A/W drawing.

### **III. Mandatory Inspection Requirements:**

During production, mandatory inspection is required to be accomplished by the contractor as follows:

A. Level of Inspection (LOI).

1) Critical Characteristics: 100% inspection and documentation of dimensions taken shall apply.

2) Major and Minor Characteristics - LOI shall be I/A/W a sampling plan acceptable to the QAR.

B. Critical Characteristics:

1. CHROME PLATE AREA'S INDICATED ON DRAWING

2. ZONE 4 F

.2185/ .2190 SPHERICAL 2AD (TYP)

3. ZONE 3E FOR 1.56 LENGTH

1.9945/1.9930 DIA BEFORE CHROME PLATE

2.2.0035/2.0005 DIA AFTER CHROME PLATE

1.9965/1.9960 DIA AFTER GRIND 6 /

.001 MIN. CHROME PLATE THICKNESS (REF)

4. ZONE 8 D

M. 1.6598/1.6698 DIA. TO DEPTH SHOWN

THREAD 1.75-12 UN-3B PER

SPEC MIL-S-7742, P.D 1.6959/1.7017

THD RELIEF 1.774/1.784 DIA X.180 WIDE

CHAMFER FIRST THREAD 1.780 DIA. X60 INCL ANGLE

5. ZONE 3 D SLOTS TO BE ON OF

1.9990/ 1.9985 DIA, WITHIN .001

6. ZONE 4C 1.9945/1.9930 DIA BEFORE PLATING (2 PLACES)

2.006/2.003 DIA AFTER PLATING

1.9990/1.9985 DIA AFTER GRIND

.002 MIN CHROME PLATE THK -4 PLACES

7. M. 1.746/1.741 DIA

CHAMFER 1.630 DIA X45

1 3/4. 16 UN-3A THREAD, SPEC. MIL-S-7742

M.P. DIA 1.7084/1.7054 BEFORE CAD. PLATE

STD. P. DIA 1.7084/ 1.7054 AFTER CAD PLATE

THREAD RELIEF DIA 1.659/1.649

8. DIMENSIONS OF CADMIUM PLATED PART APPLY BEFORE PLATING

FOR SPOT TION ALLOW .0005 PLATING THICKNESS ON CADMIUM

PLATED SURFACE

C. Major and Minor Characteristics

1) Shall be defined by the contractor subject to QAR concurrence, unless defined on applicable drawings and associated specifications.

IV. Unless expressly provided for elsewhere in this Clause, equipment such as fixtures, jigs, dies, patterns, templates, mylars, special tooling, test equipment, or any other manufacturing aid required for the manufacture and/or testing of the subject item(s) will not be provided by the Government or any other source and is the sole responsibility of the contractor. The foregoing applies notwithstanding any reference to such equipment or the furnishing thereof that may be contained in any drawing or referenced specification.

**FIRST ARTICLE TESTS REQUIRED (CONTRACTOR TESTING)**

[NSN: 1680-01-114-6134, P/N: (78286) 70358-06307-111, Revision "L"  
NOMEN: LINER, GEARBOX (H-60 HELICOPTER)

**I. First Article Inspection/Test Criteria:** The tests to be performed under the First Article approval clause of the contract are:

A. Dimensional Check (100%)

B. Form

C. Compliance with drawing (78286) 70358-06307-111, Revision "L" and specifications referenced therein.

D. Review documentation as provided under DD 1423 requirements.

In addition to the above tests, the First Article(s) to be delivered hereunder shall also be subjected to those tests which will demonstrate whether the article(s) comply with contract requirements.

**II. SPECIAL INSTRUCTIONS:** The contractor shall be responsible for providing necessary parts and repair of the First Article Sample(s) during testing.

**III. NOTIFICATION OF TESTING:** The contractor shall notify the PCO, ACO and QAR prior to conducting First Article Tests so that the Government may witness such testing (see I-962, para. (A)).

A. The QAR shall be present to witness all First Article Tests.

IV. Test Report: The test report shall be in accordance with MIL- STD-831 and shall be submitted (2 copies) via the Cognizant CAO/QAR to the Navy Naval Inventory Control Point, (NAVICP) Phila. PA Attn: Code 0731. The CAO/QAR shall provide comments on Form DD 1222 (2 copies) which shall be forwarded with the test report. Approval of the test report is the PCO's responsibility. Upon notification of approval/conditional approval, the ACO shall execute the DD 250 to indicate Government acceptance of the test report.

V. Disposition of First Article Sample(s)

A. Sample(s) may be considered as production items under the contract provided the sample(s) can be refurbished to ready for issue (RFI) condition and provided the sample(s) have inspection approval of the cognizant QAR. Sample(s) may be shipped as production items only after all other units required under the contract have been provided and are ready for shipment.

B. Sample is to be unpainted. Corrosive areas are to be coated with a light preservative.

C. The successful offerer will be furnished a sample to serve as an aid in manufacturing. Any alleged conflict between the sample and the applicable drawings/specifications shall be promptly reported in writing to the contracting officer.

1. Following production of all items under the quantity requirements of the contract, the contractor will be responsible for the return of the Government furnished sample in ready for issue (RFI) condition to the Government.

**I-962 First Article Approval (Contractor Testing)**

A. The contractor shall test 1 unit(s) of lot/item 0001 as specified in this contract. At least 45 calendar days before the beginning of First Article Tests, the contractor shall notify the contracting officer, in writing, of the time and location of the testing so that the Government may witness the tests.

A. The contractor shall submit the First Article Test Report within 180 calendar days from the date of this contract to:

NAVICP 700 Robbins Avenue, Bldg 2C  
Philadelphia, PA 19111-5098  
Attn: code: 0731

Marked "FIRST ARTICLE TEST REPORT: Contract NO: lot/item NO. ". Within 30 calendar days after the government receives the test report, the contracting officer shall notify the contractor, in writing, of the conditional approval, approval, or disapproval of the First Article. The notice of conditional approval or approval shall not relieve the contractor from complying with all requirements of the specifications and all other terms and conditions of this contract. A notice of conditional approval shall state any further action required of the contractor. A notice of disapproval shall cite reasons for the disapproval.

C. If the First Article is disapproved, the contractor, upon government request, shall repeat any or all First Article Tests. After each request for additional tests, the contractor shall make any necessary changes, modifications, or repairs to the First Article or select another First Article for testing. All costs related to these tests are to be borne by the contractor, including any and all costs for additional tests following a disapproval. The contractor shall then conduct the tests and deliver another report to the Government under the terms and conditions and within the time specified in paragraph B above. The government reserves the right to require an equitable adjustment of the contract price for any extension of the delivery schedule, or for any additional costs to the Government related to these tests.

D. If the contractor fails to deliver any First Article report on time, or the contracting officer disapproves any First Article, the contractor shall be deemed to have failed to make delivery within the meaning of the default clause of this contract.

E. Unless otherwise provided in the contract, and if the approved First Article is not consumed or destroyed in testing, the contractor may deliver the approved First Article as part of the contract quantity if it meets all contract requirements for acceptance.

F. If the government does not act within the time specified in paragraph B or C above, the contracting officer shall, upon timely written request from the contractor, equitably adjust under the changes clause of this contract the delivery or performance dates and/or the contract price, and any other contractual term affected by the delay.

G. Before First Article Approval, the acquisition of materials or components for, or the commencement of production of, the balance of the contract quantity is at the sole risk of the contractor. Before First Article approval, the costs thereof shall not be allocable to this contract for (1) progress payments, or (2) termination settlements if the contract is terminated for the convenience of the Government.

H. The contractor shall provide both the First Article and the production quantity at the same facility and shall submit a certification to this effect with each First Article.

## **PRODUCTION LOT TESTING REQUIREMENTS**

[NSN: 1680-01-114-6134 P/N: (78286) 70358-06307-111 , Revision "L" OR  
LASTEST REV

NOMEN: LINER, GEARBOX (H-60 HELICOPTER)

The material produced under contract shall be accepted by the cognizant CAO/QAR contingent upon the successful completion of these requirements.

### **I. Production Lot Test Sampling Requirements**

A. The cognizant CAO/QAR shall select 5 item(s) at random from the first produced.

B. Production Lot Testing to be completed during production after First Article approval.

II. The tests to be performed under the Production Lot Sample testing provisions of the contract are:

A. Compliance with drawing (78286) 70358-06307-111, Revision "L" and specifications referenced therein.

B. Form

C. Dimensional Check

D. Review of documentation as provided under CDRL (DD1423) requirements.

In addition to the above tests, the Production Lot Samples(s) to be delivered hereunder shall also be subjected to that test which will demonstrate that the sample(s) comply with contract requirements.

### **III. Testing Location, Cost and Estimated Lead-time**

A. All testing to be accomplished at contractor's facility.

Within fifteen days of completion of Production Lot Testing, NAVAVNDEPOT, Jacksonville FL. and/or CAO/QAR shall prepare and submit two copies of their test report with conclusions and recommendations to the NAVICP-PHIL code 0731.

#### IV. NOTIFICATION OF TESTING:

The contractor shall notify the PCO, ACO and QAR prior to conducting Production Lot Tests so that the Government may witness such testing.

- A. The QAR shall be present to witness all Production Lot Test.

#### V. Inspection of Samples

- A. Upon inspection of Production Lot Sample(s) two (2) copies of the Material Inspection and Receiving Report (DD Form 250), bearing the QAR's signature and indication of preliminary inspection, shall be forwarded to NAVICP –PHIL code 0731 with duplicate copies to NAVAVNDEPOT Code 6.3.4.70 and to the designated test facility. The envelope shall be clearly marked. "DO NOT OPEN IN MAILROOM".
- B. Sample(s) may be considered as production items under the contract provided the sample(s) can be refurbished to ready for Issue (RFI) condition and provided the sample(s) have inspection approval of the cognizant CAO/QAR. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.



**C-331      PRODUCTION LOT SAMPLE TESTING [CONTRACTOR TESTING]**

A. The Production Lot Samples shall be selected at random by the cognizant government inspector. The samples shall be identified by contract number, lot number and be clearly marked as follows:

**PRODUCTION LOT TEST SAMPLES**

**NOT RFI MATERIAL**

**DO NOT TAKE UP IN STOCK**

B. Such samples shall be tested in sufficient time prior to the delivery date of the production articles to allow a 30 day period for testing and written notification by the contracting officer of the approval or disapproval of the samples. Within 15 days of the receipt of the samples, the CAO shall notify the contracting officer, Naval Inventory Control Point, Phila. PA code 0731, of the results of the testing, together with a recommendation for approval or disapproval.

C. In the event the contractor does not receive written notification of approval or disapproval of the samples for a particular production lot within 45 days from their submission for such testing, the contract delivery schedule shall be equitably adjusted as necessary.

D. If the contractor fails to deliver any Production Lot Samples for testing within the time or times specified, or if the contracting officer disapproves any Production Lot Samples, the contractor shall be deemed to have failed to make delivery within the meaning of the default clause of this contract, and this contract shall be subject to termination for default.

E. In order for a Production Lot to be acceptable, all samples representative of the lot must pass all the contract requirements. In the event a sample fails to pass such requirements, the lot will be rejected. In such event, the government may, at its option and at no additional cost to the government, (I) terminate all or any portion of this contract for default, (II) require the manufacture of a new Production Lot, or a rework of the rejected Production Lot if the means and procedures proposed by the contractor for rework are acceptable to the government, or (III) require the submission of additional samples for test. The foregoing procedures shall apply to new or reworked production lots in the same way as they did to the original Production Lot.

F. For each additional sample or each resubmission of a modified sample which the contractor is required to submit for approval hereunder as a result of a failure of a previous sample to conform to the requirements of the specification, the contractor shall pay to the government the costs of reinspection, examination and retesting and the contractor and his sureties (if any) shall be liable for the amount of such costs.

G. Nothing contained in the foregoing provisions of this clause, and no action of the government in accordance herewith, shall in any way prejudice the right of the government under the clause of this contract entitled "Default".



# CONTRACT DATA REQUIREMENTS LIST

(2 Data Items)

Form Approved

OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 220 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

<b>A. CONTRACT LINE ITEM NO.</b>		<b>B. EXHIBIT</b>		<b>C. CATEGORY:</b> TDP <input type="checkbox"/> TM <input type="checkbox"/> OTHER <input type="checkbox"/>			
<b>D. SYSTEM/ITEM</b> 9G-1680-01-114-6134		<b>E. CONTRACT/PR NO.</b>		<b>F. CONTRACTOR</b>			
1. DATA ITEM NO. 0003	2. TITLE OF DATA ITEM REQUEST FOR DEVIATION			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-80640		5. CONTRACT REFERENCE		6. REQUIRING OFFICE DSCR			
7. DD250 REQ LT	9. DIST STATEMENT REQUIRED	10. FREQUENCY AS REQUIRED	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION			
8. ADP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES		
16. REMARKS  ORIGINAL				DSCP/PCO	Draft	Final Reg	Repro
				15. TOTAL			
1. DATA ITEM NO. 0004	2. TITLE OF DATA ITEM REQUEST FOR WAIVER			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-80641		5. CONTRACT REFERENCE		6. REQUIRING OFFICE DSCR			
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED	10. FREQUENCY AS REQUIRED	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION			
8. ADP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES		
16. REMARKS  ORIGINAL				NAVICP/02	Draft	Final Reg	Repro
				15. TOTAL			
G. PREPARED BY GERALD ROSS 0731.21		H. DATE 12/17/02		I. APPROVED BY GERALD ROSS		J. DATE 12/17/02	

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)					Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. Listed in Block E.						
A. CONTRACT LINE ITEM NO.		B. EXH/ATCH NO.		C. CATEGORY:		
				TDP                      TM                      OTHER		
D. SYSTEM/ITEM 9G-1680-01-114-6134		E. CONTRACT/PR NO.		F. CONTRACTOR		
1. DATA ITEM NO. 0005		2. TITLE OF DATA ITEM CERTIFICATION DATA REPORT		3. SUBTITLE CERTIFICATIONS		
4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80678				5. CONTRACT REFERENCE C-321: SPECIFICATION		6. REQUIRING OFFICE DSCR
7. DD 250 REQ 1.T	9. DIST STATEMENT REQUIRED	10. FREQUENCY AS REQUIRED	12. DATE OF FIRST SUBMISSION SEE BLOCK 16*	14. DISTRIBUTION		
8. ADP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION SEE BLOCK 16**	b. COPIES		
				Final		
				a. ADDRESSEE		
				Draft    Reg    Repro		
16. REMARKS BLOCK #4 (AUTHORITY) PARA. 10.1, 10.2, 10.2.1, 10.2.2, 10.2.4, AND 10.5  BLOCK #12, #13: * AT TIME OF FIRST ARTICLE TEST ** UPON SUBMISSION OF PRODUCTION LOT SAMPLES AND AT TIME OF CONTRACT COMPLETION, CONTRACTOR SHALL RETAIN 100% OF CONTRACT QUANTITY RECORDS FOR SEVEN YEARS.  BLOCK #3: SEPARATE REPORTS SHALL BE PROVIDED., THE BELOW LISTED CERTIFICATION REPORTS FOR PRIME PROCESS AND MATERIAL SPECIFICATIONS SHALL INCLUDE CERTIFICATION THAT ALL VENDORS PERFORMING THESE PROCESSES ARE PRIME (OEM) APPROVED SOURCES.  BLOCK #5: CONTRACT REFERENCE:  1. CERTIFICATION OF APPROVED MATERIALS I/A/W THE APPLICABLE DRAWINGS. 2. PROCESSES I/A/W THE APPLICABLE DRAWINGS AND SPECIFICATIONS. 3. GAS CARBURIZE AREAS INDICATED PER SS8015 TO PRODUCE .035-.050 DEPTH OF THE CASE IN FINISHED PART. BEFORE FINISH MACHINING HEAT TREAT PER SS8015 TO ROCKWELL C58-64 OR EQUIVALENT CASE HARDNESS WITH ROCKWELL C 25-46 CORE HARDNESS 4. SS 8015 REQUIREMENT FOR COUPON TYPE & AND MICROSTRUCTURAL EXAMINATION ARE NOT APPLICABLE 5. MIL-C-13924 BLACK OXIDE DULITE OR EQUIV 6. ALTERNATE MATERIAL AMS6260 9310 BAR OR TBG 7. ALTERNATE MATERIAL 4320 OR 8620, PER ASTM A534, 4320 OR 8620 PER ASTM A519. TUBING SHALL ALSO MEET AMS 2301 CLEANLINESS REQUIREMENT.				CAO/QAR    */**    1/0		
				DSCP/PCO    */**    1/0		
				NADEP    */**    1/0		
				15. TOTAL		
G. PREPARED BY GERALD ROSS 0731.21		H. DATE 12/17/02		I. APPROVED BY GERALD ROSS		J. DATE 12/17/02